DOCUMENT RESUME

ED 397 752 HE 029 352

AUTHOR Delaney, Anne Marie
TITLE The Role of Institutional Research in Higher Education: Enabling Researchers To Meet New Challenges. AIR 1996 Annual Forum Paper.
PUB DATE May 96
NOTE 24p.; Paper presented at the Annual Forum of the Association for Institutional Research (36th, Albuquerque, NM, May 5-8, 1996).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS College Administration; Community Colleges; Educational Policy; Financial Exigency; Higher Education; *Institutional Research; Researchers; Role Perception; Small Colleges; Surveys; Trend Analysis; Universities
IDENTIFIERS *AIR Forum

ABSTRACT

A survey of institutional researchers at 243 New England colleges and universities examined respondents' (N=127) views on the current and projected roles of institutional research. Results document limited resources particularly in small institutions. Also, a majority of institutional researchers reported that they were engaged extensively in doing administrative reports; only a minority were conducting policy studies. Bivariate analyses revealed the strongest relationships between the institution's size and the scope of the institutional research function, the reporting relationship, and the size and qualifications of the institutional research staff. Multivariate analysis identified the size of the institutional research staff and the qualifications of the institutional research director as significant predictors of involvement in planning and policy studies. These data indicate the need to enhance the presence, qualifications and level of activity of institutional researchers in order to strengthen their contribution to institutional decision making. Recommendations address the need to: (1) enhance the capacity for conducting complex research studies, (2) shift the focus from reporting to research, (3) strengthen the capacity for institutional research at small colleges, (4) create and support high level audiences for institutional research studies, (5) increase involvement in academic studies, and (6) expand the focus of institutional research to include relevant factors and trends in the external environment. (Contains 11 references.) (Author/DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

60

Running Head: ENABLING RESEARCHERS TO MEET NEW CHALLENGES

ED 397 752

The Role of Institutional Research in Higher Education: Enabling Researchers to Meet New Challenges

Anne Marie Delaney
Director of Program Research
Boston College School of Education
Campion Hall 336A
Chestnut Hill, MA 02167
(617) 552-0682

HE 029 352

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
AIR
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

A paper presented at the 36th Annual Forum of the Association for Institutional Research, Albuquerque, New Mexico, May 5-8, 1996

BEST COPY AVAILABLE

AIR
for Management Research, Policy Analysis, and Planning

This paper was presented at the Thirty-Sixth Annual Forum of the Association for Institutional Research held in Albuquerque, New Mexico, May 5-8, 1996. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum Papers.

Jean Endo
Editor
AIR Forum Publications

The Role of Institutional Research in Higher Education: Enabling Researchers to Meet New Challenges

ABSTRACT

Based on a survey of 243 New England colleges and universities, this paper is designed to contribute to an understanding of the current and projected roles of institutional research and to discuss the implications of these roles for the education and training of future institutional researchers. Results document limited resources particularly in small institutions. Also, a majority of institutional researchers report that they are engaged extensively in doing administrative reports; only a minority are conducting policy studies. Bivariate analyses reveal the strongest relationships between the institution's size and the scope of the institutional research function, the reporting relationship, and the size and the qualifications of the institutional research staff. Multivariate analysis identified the size of the institutional research staff and the qualifications of the institutional research director as significant predictors of involvement in planning and policy studies.

These data indicate the need to enhance the presence, qualifications and level of activity of institutional researchers in order to strengthen their contribution to institutional decision making. Recommendations are offered to achieve these goals and prepare the institutional research profession for the challenges confronting higher education now and in the 21st century.

Introduction

This paper is intended to contribute to an understanding of the current roles of institutional research across diverse institutions; to discuss the implications of these roles for the education and training of institutional researchers; and to propose how the institutional research profession might prepare to meet the challenges confronting higher education now and in the 21st century.

Higher education theorists and practitioners claim that institutional research is essential to effective decision making in colleges and universities. Further, recent developments - including growing competition, rising costs, the need for cost containment, public demand for accountability, federal reporting requirements, and declining enrollment and graduation rates among certain student segments - have expanded the need both for institutional research and for effective collaboration between researchers and administrators. In colleges and universities throughout the country, institutional research is being called upon increasingly to serve critical roles informing decision-making, planning and policy formulation. While many leaders and decision-makers in the higher education community recognize the need for institutional research to guide their planning, some have not yet developed the capacity within their institutions.

The potential contribution and evolving nature of institutional research to college and university planning and policy development have been well documented in the literature. Saupe (1990) identified institutional research as an essential component of sound college and university governance which should occur whenever any planning initiatives, policy issues or institutional decisions are proposed. In 1985, Peterson observed that institutional research continues to evolve as a consequence of state and federal policy decisions, the changing student clientele, advances in computing and telecommunications, the shifting budgetary climate and the growing internationalization of higher education, the increasing complexity and sophistication of decision making and the growing number and volume of calls for increased institutional effectiveness. More recently, Matier, Sidle and Hurst (1994) advocate expanding the scope of institutional

research to encompass the roles of information architect, change agent and consultant of choice within higher education institutions.

Preparation for these new roles and the continued growth of institutional research as a profession require information about the functioning of institutional research at different colleges and universities, the identification of existing needs for professional training and development, and the creation of structures and plans to meet the emerging needs and fulfill these new roles. Clyburn (1991) reports that the current models of institutional research and the emerging roles and activities of the director of institutional research have received limited investigation; the need is particularly acute with respect to small, private colleges. Volkwein (1990) provides a rationale for documenting the diversity of institutional research across institutions. "The effectiveness and efficiency of the institutional research profession can only be improved by recognizing the wide diversity of structures and tasks that characterize campus practice and by designing the kind of collaborative support that is consistent with this diversity" (p. 26).

Data Source

This paper is based on a survey of 243 New England colleges and universities including 80 two year institutions and 163 four year colleges and universities. Responses were obtained from 127 of the 243 institutions yielding an overall response rate of 52 percent - 41 percent for the two year institutions and 58 percent for the four year colleges and universities.

The sample is comprised of diverse institutions including community colleges, liberal arts colleges and universities. The majority of responding institutions, 64 percent, are private and the vast majority, 74 percent, are four year colleges and universities. Most of the responding institutions are relatively small colleges and universities. Approximately 60 percent have enrollments of less than 2,000.

The survey was designed to assess the current level of institutional research at New England colleges and universities; to elicit ideas regarding how the role of institutional research might be expanded to increase the influence on institutional decision making and policy

development; and to identify the resources and training required to achieve the maximum potential from institutional research in various higher education institutions.

Results

Configuration of the Institutional Research Function at Responding Institutions

The scope and characteristics of the institutional research function vary substantially at these institutions. Of the 127 responding institutions, 40 percent report they have an institutional research office; another 45 percent have a person or other office engaged in institutional research activities, but no office; and the remaining 15 percent have neither an institutional research office nor an institutional research function. Among the 80 institutions who identified the reporting relationship, the largest number, 27, reported that the institutional research office or function reports to the President and 16 and 14, respectively, report to the Provost/Vice Chancellor and Vice President.

There is also considerable diversity in terms of the levels of positions held by those doing institutional research, their level of experience and academic background. The title of individuals doing institutional research ranges from Vice President to Research Assistant. Some 53 institutions reported they have an Institutional Research Director and 25 institutions have an Associate or Analyst doing institutional research. It is interesting to note that in nine institutions, individuals conducting institutional research hold the title of Vice President or Assistant Vice President and another 14 hold the title of Dean or Assistant Dean.

The level of experience for those doing institutional research reflects a substantial range from two or fewer years to 11 or more years of experience. With respect to the academic background of those doing institutional research, most hold a master's degree in the social sciences or in education.

Role of Institutional Research

Typical Institutional Research Projects

In an effort to identify the role of institutional research at various institutions, respondents were asked to describe the typical research projects they conducted. The descriptions of the research projects were then classified into the following eight categories:

Reports: institutional statistics, internal and external administrative reports;

Research, Planning & Policy Analysis: planning and policy analysis studies, forecasting/statistical projections, longitudinal research, and market and survey research;

Financial Studies: cost analysis, budget planning, and financial projections;

Enrollment Management Studies: admission, financial aid, and retention studies;

Student Surveys: student and alumni/ae surveys;

Faculty Studies: faculty evaluations, faculty workload studies and salary analyses;

Academic Studies: academic program review, academic program evaluation, assessment of placement tests and outcomes assessment; and

Other Projects: space utilization studies, transfer studies and other miscellaneous projects.

Table 1 displays the frequency and percent of responding institutions engaged in these various activities. Clearly, enrollment management studies are the most frequently reported activity. Approximately two-thirds of the institutions reported they were doing one or more studies in this area including admission, financial aid, enrollment and retention studies. Close to 50 percent report they typically are responsible for institutional reports which involve generating statistics for internal audiences and providing data to external audiences. Slightly more than one quarter report involvement in research, planning and policy studies.

Table 1. Typical Institutional Research Projects

Type of Institutional Research Projects	Number	Percent[a]
Enrollment management	85	66.9%
Institutional reports	62	48.8
Research, planning & policy analysis	35	27.6
Academic studies	23	18.1
Student surveys	20	15.7
Financial studies	11	8.7
Faculty studies	10	7.9
Other	59	46.5
		(N=127)

[a] The cumulative percentage exceeds 100 since some institutions conduct more than one type of institutional research project.

As illustrated in Table 1, relatively few institutions (N=11) report they typically conduct financial studies such as cost analysis, budget planning, financial projections or resource allocation studies. Similarly, only a small number of institutions (N=10) report they typically conduct faculty studies such as faculty evaluations, faculty workload studies and faculty salary analyses.

Typical Audiences for Institutional Research Projects

Survey responses indicate that institutional researchers conduct studies for diverse audiences both within and outside the institution. Over 50 percent typically report the results of their studies to various administrative offices within the institution. Some 14 percent report that the President, Vice President and Trustees comprise a typical audience for their studies and another 14 percent identify deans, chairpersons and faculty as typical audiences for their reports.

Future Directions for Institutional Research

To provide a perspective on the future of institutional research at New England's colleges and universities, survey respondents were asked to identify the kinds of institutional research

studies their institution would like to do that they currently are not doing and to specify the staff, financial and computer resources that would be needed in order to do these studies. In addition, respondents were asked to indicate the types of technical training and professional development experiences that would be most helpful in achieving the maximum potential from institutional research at their institution.

Using the previously defined categories, Table 2 displays the types of institutional research studies institutions would like to do. Similar to the report on typical projects currently being done, the largest number of institutions would like to do more enrollment management studies. However, in contrast to the distribution of current projects, a higher proportion of institutions, 38.6 percent, express interest in doing more academic studies including academic program reviews, academic program evaluations and outcomes assessment studies. Close to one-fifth also reported interest in conducting more student surveys.

Table 2. Desired Institutional Research Studies

Type of Institutional Research Studies	Number	Percent[a]
Enrollment management	67	52.8%
Academic studies	49	38.6
Student surveys	24	18.9
Planning & policy analysis	19	15.0
Financial studies	11	8.7
Institutional reports	7	5.5
Faculty studies	5	3.9
Other	46	36.2
		(N=127)

[a] The cumulative percentage exceeds 100 since some institutions desire to conduct more than one type of institutional research study.

BEST COPY AVAILABLE

Seventy-eight respondents reported they would need additional staff to complete the desired institutional research studies. Four respondents projected that an institutional research office would be needed while most respondents recommended increasing the professional research staff to conduct the desired studies. In addition to projecting additional staff, some 30 respondents also indicated that more computer resources would be needed. Their recommendations ranged from upgrading current systems to establishing new computer networks.

Results from Bivariate Analysis:

The Relationship of Institutional Characteristics to Institutional Research

Institutional Size and the Institutional Research Function

Bivariate analyses of the relationship between institutional characteristics and the institutional research function revealed the strongest relationship with the institution's size. As shown in Table 3, the scope of the institutional research function, the reporting relationship, the size and the qualifications of the institutional research staff vary significantly in relation to the institution's size. All of the institutions with enrollment of 5,000 or more, compared with only one-fifth of the institutions with enrollments less than 1,000, had an institutional research office. Reporting relationships also vary in relation to size; over 90 percent of the larger institutions report at the vice presidential, provost or presidential level while the smaller institutions report at many different levels. As expected, larger institutions had larger institutional research staff and were much more likely to have an institutional research director with a doctorate; 54.5 percent of the largest institutions, compared with only 7.5 percent of the smallest institutions, had a research director with a doctorate.

Table 3. Variations in the Institutional Research Offices by Institutional Size

A. Institutional Research Presence

Institution Size	Institutional Research Office	Institutional Research Function	No Office or Function	Total
5,000 or More	100%	-	-	100% (N=11)
2,000 - 4,999	53.3	43.4	3.3	100% (N=30)
1,000 - 1,999	41.7	41.7	16.6	100% (N=24)
Less than 1,000	20.8	56.6	22.6	100% (N=53)
$X^2 = 29.22$ $p \leq .001$				*Total N=118*

B. Reporting Relationship

Institution Size	President	Provost/Vice Chancellor	Vice President	Dean	Other Offices	Total
5,000 or More	9.1%	72.7%	9.1%	9.1%	-	100% (N=11)
2,000 - 4,999	28.0	24.0	8.0	16.0	24.0	100% (N=25)
1,000 - 1,999	25.0	16.7	33.3	8.3	16.7	100% (N=12)
Less than 1,000	48.1	-	22.3	11.1	18.5	100% (N=27)
$X^2 = 30.87$ $p \leq .01$						*Total N=75*

C. Size of Full-Time Institutional Research Staff

Institution Size	Two or more	One	None	Total
5,000 or More	81.8%	18.2%	-	100% (N=11)
2,000 - 4,999	13.0	78.3	8.7	100% (N=23)
1,000 - 1,999	22.2	77.8	-	100% (N=9)
Less than 1,000	-	54.5	45.5	100% (N=11)
$X^2 = 34.41$ $p \leq .001$				*Total N=54*

D. Presence of Institutional Research Director with a Doctorate

Institution Size	A Director with Doctorate	No Director with Doctorate	Total
5,000 or More	54.5%	45.5%	100% (N=11)
2,000 - 4,999	23.3	76.7	100% (N=30)
1,000 - 1,999	16.7	83.3	100% (N=24)
Less than 1,000	7.5	92.5	100% (N=53)
$X^2 = 14.61$ $p \leq .01$			*Total N=118*

Institutional Characteristics and the Role of Institutional Research

Results from bivariate analyses reveal several meaningful relationships between the role of institutional research and selected characteristics of the institution. Larger, four year and private institutions were more likely to engage in projects involving social science research methodology, such as planning, forecasting, and research on faculty and academic issues. Also, compared with public institutions, private institutions were more likely to engage in advanced research projects and in studies focused on academic issues.

Several statistically significant relationships were also found. The presence of an institutional research director with a doctorate was found to be significantly related to involvement in planning studies (X^2 =14.83 $p \leq .001$) and enrollment management studies (X^2 = 4.61 $p \leq .05$). Institutions with larger research staff were also more likely to engage in planning, policy analysis and forecasting (X^2 = 8.41 $p \leq .05$). As shown in Table 4, Chi-Square analysis revealed a statistically significant relationship between institutional size and involvement in research, planning and policy studies (X^2= 8.12 $p \leq .05$). Compared with two year institutions, four year institutions also conducted more research, planning and policy studies (X^2 = 4.35 $p \leq .05$).

Table 4. Variation in the Role of Institutional Research by Institutional Characteristics

A. Variation by Institutional Size

Institution Size	Research & Planning	Non-Research & Planning	Total
5,000 or More	54.5%	45.5%	100% (N=11)
2,000 - 4,999	26.7	73.3	100% (N=30)
1,000 - 1,999	25.0	75.0	100% (N=24)
Less than 1,000	15.1	84.9	100% (N=53)
X^2 = 8.12 $p \leq .05$			*Total N=118*

B. Variation by Institutional Type

Institution Type	Research & Planning	Non-Research & Planning	Total
4 Year	26.6%	73.4%	100% (N=94)
2 Year	9.1	90.9	100% (N=33)
X^2 = 4.35 $p \leq .05$			*Total N=127*

Institutional Characteristics and Perspective on Institutional Research Topics

Respondents were asked to estimate the importance of various institutional research topics in relation to the needs of their institution. The list of topics included: the Role of Institutional Research in Higher Education, Organizing an Institutional Research Office, Building Institutional Research Databases, Admission Research Issues, Financial Aid Research Issues, Retention Studies, Using Institutional Research to Enhance Academic Life, Using Institutional Research to Improve Student Life, Outcomes Assessment, Use of Quantitative Methods in Institutional Research, Use of Qualitative Methods in Institutional Research, and the Use of Survey Research in Institutional Research.

Chi square analyses revealed statistically significant relationships between selected institutional characteristics and the perceived importance of these various institutional research topics. Respondents at four year institutions attributed more importance to conducting financial aid studies ($X^2 = 4.53$ $p \leq .05$); approximately 70 percent of those at four year colleges and universities, compared with only 48 percent at two year colleges, perceived financial aid to be an important or very important topic. Conversely, those at two year institutions ascribed more importance to survey research ($X^2 = 4.52$ $p \leq .05$); approximately three-quarters of the respondents at two year colleges, compared with about one-half of those at four year colleges, perceived survey research to be an important or very important topic. Variations were also found between public and private institutions. Private institutions put more emphasis on financial aid studies ($X^2 = 5.34$ $p \leq .05$) while public institutions placed more importance on outcomes assessment ($X^2 = 4.81$ $p \leq .05$).

Results from Multivariate Analysis:

Predicting Institutional Research Involvement in Planning and Policy Development

Discriminant analysis results, presented in Table 5, identified both research staff and institutional characteristics as predictors of the types of institutional research conducted in different colleges and universities. For example, four variables were found to predict successfully whether or not institutional research staff engaged in research, planning and policy

analysis studies. The structure coefficients were .75 for institutional research staff size; .61 for institutional research office or function; .49 for institutional research staff qualifications; and .18 for the type of institution - public or private. The canonical correlation of .52 indicates that the function explains 27 percent of the variance in the nature of institutional research projects.

Table 5. Predicting Institutional Research Involvement in Planning and Policy Development

Predictors	Structure Coefficients	Percent Correctly Classified
Institutional Research Staff Size	.75	71.7 %
Institutional Research Office or Function	.61	
Institutional Research Staff Qualifications	.49	
Type of Institution (Private versus Public)	.18	
Canonical Correlation	.52	$X^2 = 15.62$ df=4 $p \leq .01$

Discussion

Findings from this research provide a perspective on the role of institutional research at various colleges and universities. The information may be most revealing for smaller institutions since 60 percent of the responding institutions have enrollments of less than 2,000. The data identify various aspects of the institutional research function including: the scope of the institutional research presence in the institution; the qualifications of those doing institutional research; the nature of their professional activity; and the audiences for whom institutional researchers conduct their studies.

Institutional Research Presence. Among all the responding institutions, only 40 percent have an institutional research office and only 45 percent report at the vice presidential or higher level of the organization. Similar to Volkwein's (1990) finding, the existence of an institutional research office varies substantially by the size of the institution; 100 percent of the larger institutions compared with only 21 percent of the smaller institutions have an institutional research office.

Qualifications. With regard to academic qualifications, the largest proportion of those doing institutional research have a master's degree. Only 23 of the 127 responding institutions have an institutional research director with a doctorate. The qualifications of those doing institutional research are critical if institutional research is going to have a significant impact on decision making. Results from this research reveal statistically significant relationships between the qualifications of institutional research staff and involvement in planning and policy studies; doctoral level institutional research directors were significantly more likely to engage in planning and policy development studies. In reporting the results from a previous study of institutional research structures and functions, Volkwein (1990) also commented on the positive influence of academic qualifications on the nature of the work performed by institutional researchers.

Nature of Institutional Research Activity. Institutional researchers responding to this survey report that they are engaged extensively in doing institutional reports and conducting various enrollment management studies. However, only a minority report they are conducting planning and policy studies, academic studies and financial studies. Identification of the audiences indicates that these institutional research reports and studies are generally not conducted for the highest level decision-makers within the institutions. While a majority report they conduct studies for various administrative offices, only a small minority identify the President, Vice President or Board of Trustees as an audience for their research. Reflecting the limited involvement in academic studies, very few identify deans, chairpersons and faculty as audiences for their research.

The nature of the work conducted by institutional researchers also determines the extent to which the research may impact decision making. Results from this study indicate that institutional researchers, particularly at small colleges, should strengthen their capacity and develop political support for conducting more research on academic policies and the financial implications of these policies. Decision making at colleges and universities frequently involves coping with tensions between academic issues and financial concerns. By addressing such

BEST COPY AVAILABLE

tensions in the study design, institutional researchers may offer a unique and critical contribution to planning and policy development.

Enhancing the Role of Institutional Research. These data indicate the need to enhance the presence, qualifications and level of activity of those doing institutional research particularly at small colleges and universities. While support from administrators is essential, institutional researchers might also exercise initiative to enhance the institutional research presence in institutional decision making contexts. Possible approaches include: establishing formal and informal relationships with executive level administrators; continually seeking out information regarding decision makers' information needs; taking the initiative in informing decision makers regarding the relevance of data and studies to inform their decisions; and developing political support for establishing executive level audiences for institutional research studies.

Future Plans. Vision, competence and commitment are required if institutional research is to evolve to a new role in the 21st century. University administrators and institutional researchers may first need to become more aware of the importance of their contribution to the university decision making process in critical policy areas. When respondents in this study were asked to identify the kinds of institutional research studies their institutions would like to do that they are currently not doing, a minority expressed an interest in doing more policy and planning studies, more financial studies and more academic studies.

Professional Development Needs. Respondents may have expressed limited interest in conducting such studies due to a perceived lack of relevant expertise and required resources. Relevant knowledge and skills are essential prerequisites for effective institutional research. Terenzini (1993) conceptualizes the types of knowledge and skills required for competency in institutional research in terms of three tiers of organizational intelligence: technical and analytical, issues and contextual intelligence.

Respondents in this study express strong interest in further training primarily in technical/analytical areas, with a majority seeking further training in: statistical analysis, research design, data management and personal computer applications. The perceived need is even

stronger among institutional researchers who work at institutions where there is no doctoral level institutional research director.

Perspective on Training. Policy issues confronting colleges and universities are increasingly complex; studies designed to address these issues require extensive and sophisticated methodological expertise and substantive knowledge. Those doing institutional research should continually expand their technological and statistical skills to handle institutional data effectively, and when necessary they should employ relevant technical consultants to ensure that the studies are methodologically sound to produce valid and reliable information.

Insights gained from analyses of these study findings are reflected in the following recommendations. These recommendations are intended to generate reflective discussion regarding how the role of institutional research might be configured and how institutional researchers might be prepared to meet the challenges of the 21st century.

Recommendations

1. Enhance the capacity for conducting complex research studies.

Results from this research document limited resources and possibly limited methodological and technical expertise in many of the responding institutional research offices. These limitations potentially constrain the ability of institutional researchers to conduct effective research and policy studies. Given the complex factors involved in institutional decisions, institutional researchers need to possess sophisticated research skills including substantial knowledge of research design and advanced statistics; extensive skills in data analysis; and experience and expertise in translating the results of institutional research studies into planning and policy documents. To address complex policy questions, institutional researchers will need to possess or expand their methodological and technical competence.

Presley (1990) discussed the essential role of professional competencies and expertise in creating effective institutional research offices. She observes that effective institutional research offices possess researchers with strong quantitative skills, superb oral and written presentation

skills and excellent communication skills. In addition, effective institutional research offices often involve specialists in technology and other experts in areas such as measurement, testing and survey research. In their projection of how institutional research ought to be in the 21st century, Matier, Sidle and Hurst (1994) observe that the environment in which all of higher education functions is becoming more and more complex. To perform effectively in such an environment, institutional researchers will need to become the information architects, change agents and the consultants of choice in their institution. Such a mandate requires advanced knowledge and expertise.

2. Develop creative ways to shift the focus from mere reporting to research.

Findings from this study reveal that institutional researchers, particularly at small colleges, are much more involved in routine reporting than they are in research and planning studies designed to inform policy decisions. If institutional researchers are to have an impact on decision making, they need to reallocate time and resources to focus on areas of critical importance to higher education. Given limited resources, the shift may need to be gradual, but it might be achieved by enhancing the capacity for conducting research through collaboration with institutional researchers at other institutions; participation in research related professional development programs; and selective use of methodological and technical consultants. In addition, institutional researchers might exercise more discretion in responding to requests for information and seek external funding to expand the resources for institutional research.

In her discussion on creating effective institutional research offices, Presley (1990, p. 106) addresses the issue of reporting versus research. "When institutional research is perceived simply as a number crunching activity, not only does the profession lose, but so does each and every institution where this attitude prevails. Even if limited staffing prevents an office from undertaking major second order activities, it is possible to turn first-order reporting into an interesting and important activity." This could be accomplished in part by not simply providing answers in response to a question, but by seeking to understand the question and provide a context for the answer. Institutional researchers in small offices might also expand their

involvement in research and policy analysis by creating teams of helpers throughout the institution from the registrar to computing support personnel to the faculty themselves.

In their presentation of a model approach to studying student retention, Kinnick and Ricks (1993) also identify skills and requirements necessary to achieve the transformation from mere "number crunching" to policy related research. The proposed skills include: strong technical skills, mastery of both quantitative and qualitative research methodologies; knowledge of the organization; and the ability to function in the political arena. In order to advance to a higher order of functioning, institutional researchers need to increase their understanding and awareness of the political functioning of the organization; use multiple approaches and sources for gathering information; utilize training opportunities available through professional organizations to acquire necessary methodological knowledge and technical skills; increase the client-centered focus of institutional research and communicate the student voice to policy makers; and, finally, use case analysis to reflect on practice within their own institution. Kinnick and Ricks propose that such case analyses may serve to examine the usefulness of current theory in light of practice and thus help to develop better theory to guide the practice of institutional research.

3. Strengthen the capacity for conducting institutional research, particularly at small colleges.

Resources and expertise for conducting institutional research appear quite limited particularly at the small colleges and universities participating in this study. Only a minority of institutions have an institutional research office and very few have a doctoral level institutional research director. In a previous study, Clyburn (1991) also found that most small, private colleges lacked an effective institutional research operation; institutional research received inadequate institutional commitment and support; and institutional research activities were primarily dispersed, disjointed and characterized by report generation for external organizations.

Clyburn (1991) proposes a model that would expand the scope and function of institutional research at small colleges. He recommends that the institutional research director

exert ongoing leadership for systematic institutional evaluation and create a service philosophy encouraging individuals and departments to utilize the office of institutional research.

The author suggests that the potential for conducting quality institutional research studies at small institutions might also be improved by implementing professional development training opportunities for institutional researchers at small colleges; by establishing networks of consultants who might assist these institutional researchers; and by creating consortia so that smaller institutions might share knowledge, resources and the cost of consultants and training.

4. Create and support high level audiences for institutional research studies.

A primary criterion of success for institutional research is the extent to which it promotes action and influences decision making. To achieve this goal, institutional researchers must create and maintain a vital connection with the decision makers at the institution. Through these relationships, they can work to integrate the work of the institutional office into the fabric of the institution. "Integrating institutional research is vital to the success of the institution. First, successful integration maximizes the use of information. . . . Second, introducing information into the layers of the organization focuses decision making on actual knowledge rather than on conventional wisdom" (Billups & DeLucia, 1990, p. 95).

The location of the institutional research office is also critical to establishing and maintaining strong relationships with key decision makers. The institutional research office needs to be placed high enough in the organizational structure for the staff to be cognizant of the major issues and decisions facing senior management. Such proximity to key decision makers enables institutional researchers to anticipate and respond to management needs for information in a timely and effective manner (Presley, 1990).

5. Increase involvement in academic studies.

While institutional research traditionally has made substantial contributions to various administrative areas, involvement has been somewhat less extensive in academic areas. This

may be due in part to the organizational location of the institutional research office and to the faculty culture which places a high priority on academic freedom.

In the future, institutional research can make significant contributions to the academic life of the university by conducting research to inform academic policies and by providing research support to various constituents. Relevant constituencies include accrediting boards, university academic councils, educational policy committees, academic deans, chairpersons, and individual faculty members. The intellectual climate of a university, the quality of academic programs, academic standards in courses and programs, and the academic performance of students are topics that might be addressed by institutional research.

6. Expand the focus of institutional research studies to include relevant factors and trends in the external environment.

In discussing the changing role of institutional research, Chan (1993) proposed that institutional research must shift the focus from the internal context only to include the external context in order to provide effective support for strategic management. More recently, Terenzini also commented on the significance of developments in the external environment to the evolution of institutional research in his keynote address to the 1995 AIR Forum. He noted that while an understanding of the internal culture and politics is essential, the significance of the external context and climate for higher education and institutional research have increased due to the state's and the federal government's views of education as a strategic public investment. Consequently, institutional researchers need to identify the demographic, financial, political and technological developments in the external environment that will impact the college's future. Fulfilling this recommendation requires that institutional researchers expand the vision of their role, the scope of their studies and the level of their methodological and technical competence to accommodate a complex array of external as well as internal factors that will impact the growth and development of colleges and universities in the 21st century.

References

Billups, F. D., & DeLucia, L. A. (1990). Integrating institutional research into the organization. In P. T. Terenzini & E. E. Chaffee (Series Eds.) & J. B. Presley (Vol. Ed.), New directions for institutional research: No. 66. Organizing effective institutional research offices (pp. 93-102). San Francisco: Jossey-Bass.

Chan, S. S. (1993). Changing roles of institutional research in strategic management. Research in Higher Education, 34(5), 533-549.

Clyburn, M. (1991, May). An investigation of institutional research in small, private colleges in the southeastern United States. Paper presented at the annual forum of the Association for Institutional Research, San Francisco, CA.

Kinnick, M. K., & Ricks, M. F. (1993). Student retention: Moving from numbers to action. Research in Higher Education, 34(1), 55-69.

Matier, M. W., Sidle, C. C., & Hurst, P. J. (1994, May). How it ought to be: Institutional researchers' roles as we approach the 21st century. Paper presented at the annual forum of the Association for Institutional Research, New Orleans, Louisiana.

Peterson, M. W. (1985). Institutional research: An evolutionary perspective. In P.T. Terenzini & M.W. Peterson (Series Eds.) & M. W. Peterson & M. Corcoran (Vol. Eds.), New directions for institutional research: No. 46. Institutional research in transition (pp. 5-15). San Francisco: Jossey-Bass.

Presley, J. B. (1990). Putting the building blocks into place for effective institutional research. In P. T. Terenzini & E. E. Chaffee (Series Eds.) & J. B. Presley (Vol. Ed.), New directions for institutional research: No. 66. Organizing effective institutional research offices (pp. 103-106). San Francisco: Jossey-Bass.

Saupe, J. L. (1990). The functions of institutional research (2nd ed.). Tallahassee, Florida: Association for Institutional Research. (ERIC Document Reproduction Service No. ED 319 327)

Terenzini, P. T. (1993). On the nature of institutional research and the knowledge and skills it requires. Research in Higher Education, 34 (1), 1-10.

Terenzini, P. T. (1995, Fall/Winter). Evolution and revolution in institutional research. Air Currents, 33, 7.

Volkwein, J. F. (1990). The diversity of institutional research structures and tasks. In P.T. Terenzini & E. E. Chaffee (Series Eds.) & J. B. Presley (Vol. Ed.), New directions for institutional research: No. 66. Organizing effective institutional research offices (pp. 7-26). San Francisco: Jossey-Bass.